

## **All you have to do is rearrange the numbers**

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### **ABSTRACT**

This case helps students develop critical thinking skills required to address ethical problems common in a cost accounting context. The ethical issues arise from a request from the VP of Sales, asking the newly hired Chief Accountant to change maintenance and quality control costs from variable to fixed costs by changing an operational practice. The change would allow the VP of sales to maintain contribution margin targets that he could not otherwise attain. The case imposes on the Chief Accountant overt and implied managerial accounting and ethical issues. The case questions focus the participant's attention on the ethical environment of organizations and the ethical conduct of managerial accountants. Participants use the IMA's Statement of Ethical Professional Practice as a guide to propose solutions. Appropriate recommendations should also include creating incentives for future ethical conduct in the organization.

Keywords: professional ethics standards, managerial accounting, budgeting, cost behavior, case, self-interest

Note: This is a fictitious case developed for educational use. All statements, names, numbers, dates, etc. used herein were created for the purposes of this case and should not be construed as factual.

## INTRODUCTION

### Background

This case is designed to help students develop critical thinking skills required to address problems common in a cost accounting context from an ethical perspective. The scenario illustrates how decisions regarding managerial accounting issues such as cost structure, the cost of quality and variable costing can lead to ethical dilemmas for accountants. One unique feature of the case is that the ethical issues arise from a request from someone other than a superior. In addition, students are prompted to explore organizational factors and professional standards in developing courses of action. The extensive teaching notes provide material for instructors to teach the students the fundamentals of ethical conduct in the accounting profession and then assign or discuss this case that applies those concepts in a managerial accounting context.

The scenario described in this case involves a company that manufactures a single product that is wholesaled to retail outlets. The company's cost structure and desired profit target dictate a selling price and related contribution margin that the Vice President of Sales thinks is unattainable. He is also concerned that he will not be able to retain his best sales people. The Vice President of Sales approaches the newly hired Chief Accountant with a plan to alter the cost structure so that the sales and profit goals can be achieved in the current market. He asks the Chief Accountant to agree to the plan.

The Vice President of Sales' plan is to change the nature of maintenance and quality control costs from variable to fixed by changing an operational practice. He suggests periodic maintenance and inspection as opposed to the current practice based on production volume. Changing the nature of the cost would allow him to reduce the selling price and meet the contribution margin and profit targets established by the company. He reasons that by reducing the selling price, he can sell more units, meet the sales and profit targets, and keep his salespeople happy.

The case introduces a number of managerial accounting issues, some overt and some implied, in addition to the ethical implications for the Chief Accountant. The case questions are written to focus student's attention on the ethical environment of an organization in addition to ethical conduct of managerial accountants. Students should approach the case from the perspective of a managerial accountant using the Institute of Management Accountants' (IMA) Statement of Ethical Professional Practice as a guide to analyzing the issues and proposing solutions to the problem. However, appropriate recommendations should also include suggestions to change practices that may provide incentives for unethical conduct in an organization.

### Learning Objectives and Suggested Use of the Case

The learning objectives of the case are for students to:

1. demonstrate an understanding of the ethical considerations of the problem from an organizational perspective;
2. demonstrate an understanding of the ethical considerations of the problem from a professional perspective as defined by the IMA Statement of Ethical Professional Practice;
3. demonstrate an understanding of who is affected by ethical conduct and how;

4. identify alternative courses of action to solve business problems and ethical dilemmas, in particular as defined by the IMA Statement of Ethical Professional Practice; and
5. reason and select an appropriate solution that demonstrates consideration of ethical conduct beyond personal considerations.

The case was written for use with upper-level undergraduate students who have been exposed to both ethics and behavior implications of management and business systems. It could also be used in introductory or principles courses in a discussion environment to introduce students to some of these issues, particularly with respect to performance measurement and incentives. The proposed solution is targeted to upper-level students. Although designed for upper-level student populations, students may not have been exposed to the ethical considerations of the accounting profession or may have only considered these with respect to public accounting. For this reason, background discussions of the nature of a profession and of the values expected for members in the management accounting profession are recommended.

## THE CASE PRESENTED TO STUDENTS

### The Case Situation

Ryan sat at his desk reviewing the latest budget supporting schedules. He had only recently been hired as the Chief Accountant and was determined to learn all the details of this manufacturing firm. The firm was relatively small and straight forward; it manufactured a single product and wholesaled it to retail outlets, which in turn sold it to end consumers.

Ryan raised his head in response to the raps on his office door frame. He recognized Sid, the Vice President of Sales, and waved him in through the already open door.

“Hi Sid. What can I do for you?” Ryan queried.

Sid responded. “I have a problem, but I also think I have a solution. Can I talk to you about it?”

“Sure.” said Ryan.

Sid began. “Ryan, you know what the economy has been like. It’s getting harder to keep sales up, let alone increase sales. Our competitors are under-pricing us and unless I can give the retailer some price discount, I’m not sure I will be able to meet our sales projection. Now, I’m not an accountant and I’m not sure I understand all the details, but, let me try to explain my understanding of the situation. You said in a recent budget meeting that we have to have a positive contribution margin, that is, the selling price has to be greater than the variable costs of production. Otherwise, we will not be generating any profits to offset our fixed production costs. As I understand it, the contribution margin from each unit we sell gradually eats away at the fixed costs until we have sold enough units to completely cover our fixed costs. You called that the ‘break-even point’. From that point on, the contribution margin from each unit sold adds to profits. Do I have that correct?”

Ryan responded. “In a nutshell, you’ve got the concept right.”

Sid continued. “Ok. Here’s the problem. Based on your briefing in the budget meeting, the CEO said that we MUST have a contribution margin of \$2.00 per unit in order to achieve our desired pre-tax profit of \$85,000, and I have to sell 200,000 units. I’m not sure I can sell 200,000 units. And if I can’t pay good commissions to my salespeople I stand a chance of losing some of my best salespeople. Here’s Figure 1 (appendix), the handout you gave us at the budget meeting. It shows that because variable costs are \$4.00, to get a contribution margin of \$2.00,

we have to sell each unit for \$6.00. The problem is that we are being undercut by our competitors. They are giving discounts to the retailers and selling their versions of our product for less than \$6.00.”

Sid added. “I can’t reduce our price unless we can reduce our variable costs or our fixed costs. If we reduce our variable costs, then a \$2.00 contribution margin can be achieved at a lower selling price. If we can reduce our fixed costs, then we can reach our desired pre-tax profit with a lower selling price.”

“But,” Ryan interjected, “if you remember from the budget meeting, I also said that in the short-term we can’t appreciably change our cost structure. That’s a long-term solution.”

“I know. I know.” said Sid. “But, I’ve been thinking about this. Right now, as was shown in your Figure 1, maintenance on the machines is budgeted as a variable cost of 60¢ per unit and the maintenance is repeatedly scheduled after a fixed number of units of our product are manufactured. Quality testing on a sample of our products is also budgeted as a variable cost of 10¢ per unit. Shoot! We’ve been making this product so long that virtually every unit is ok. Take my word for it, only a very small number of units ever fails quality testing that results in the machines having to be re-tuned. According to your numbers, if we produce and sell 200,000 units, total maintenance costs will be \$120,000 and total quality testing costs will be \$20,000.”

“Those numbers are correct.” said Ryan.

Sid continued. “What if you turned maintenance and quality testing into fixed costs and took them out of variable costs? The budgets for those two departments wouldn’t change; they would just become fixed costs. We won’t schedule maintenance after a fixed number of units are manufactured, we would simply schedule maintenance after a unit of time has passed, for example every two weeks. Same with quality testing. Instead of testing one in every 50 units, we would just take a fixed sample of units every week and quality test them. In this way the budgets of those two departments would be fixed and not based on the level of production.”

Sid got even more animated. “Here look at what I prepared. In this hypothetical illustration, that I labeled Figure 2 (Appendix), I think I have the solution. By moving maintenance and quality testing to the fixed costs, we lower the variable costs per unit from \$4.00 down to \$3.30. This means that I can offer discounts to the retail outlets and sell our product to them for \$5.30. We can still satisfy the CEO because the contribution margin stays at \$2.00 per unit. Sure the break-even point goes up, but because of the lower selling price, I can actually sell more units ... I project as much as 275,000 units. At this number of units being sold, the overall pre-tax profits will increase to \$95,000. This will also increase sales commissions to my salespeople and I can keep them from leaving. **THIS IS A WIN, WIN SITUATION!**”

Ryan raised a question. “What about the managers of maintenance and quality testing? Might they not raise a stink?”

Sid retorted. “Don’t worry about them. I’ve been here longer than you and I know them both very well. Their overall budget remains the same and I can talk them into it, especially when I tell them that the Chief Accountant agrees with the plan. Besides, it will actually reduce their workload to keep a fixed schedule rather than having to schedule their work around how many units we produce. I’ll take care of it. All you have to do is rearrange the numbers and reduce variable costs.”

“But,” Ryan interjected, “what about the factory? Won’t the Vice President of Manufacturing need to know that more units are going to have to be made? After all he needs to

order more materials and make work schedules. Shouldn't I make a new cost budget, like Figure 2, for everyone?"

"Not a problem." said Sid. "I will let the VP of Manufacturing know that I expect more sales and he will have to make another 75,000 units. He will be more than excited about that. We won't need a new cost budget, because we aren't changing anyone's budget except for manufacturing. And they always respond to additional orders whenever my people sell more. In fact, they expect things like that to happen. If I were you I wouldn't worry about changing and distributing the budget. Besides, the CEO is really going to be pleasantly surprised when at year-end we show him the great results we got."

### The Case Requirements

If you were Ryan, what should you do? In framing your analysis, address the following six requirements.

1. What are the underlying ethical issues implied by what the VP of Sales is asking the Chief Accountant to do?
2. Who are the stakeholders that will be affected by how Ryan responds to the VP of Sales proposal? Describe how the request might affect each of the stakeholders? What is Ryan's responsibility to each stakeholder? When answering this question, think about the people and organizational positions specifically identified in the case and think beyond those to people or organizations not specifically mentioned.
3. Put yourself in Ryan's position. Just like Ryan, you do not know much about this firm. What would you research about how this organization is "run"? Are the budgets and measures of success appropriate within this firm? What would you need to find out about the ethical culture of the firm, the procedures, the policies, and the management decision making relationships that you would have to know in order to make a good decision about the VP of Sales' request?
4. Identify and discuss the standards from the IMA's Statement of Ethical Professional Practice<sup>1</sup> that apply to this case and which Ryan should consider in deciding how to handle the VP of Sales' request.
5. Identify the Chief Accountant's alternative options for responding to the VP of Sales' proposal. Discuss the possible consequences and the organizational factors and professional standards applicable to each option. When answering this question, consider that Ryan could do any one of many different things, such as, agree, disagree, remain unsure of how he should respond to the proposal, etc. How should Ryan proceed under each alternative option? The case is not explicit about what corporate guidance exists to resolve ethical dilemmas, so you may have to consider hypothetical alternatives.
6. Which of the options would you recommend to the Chief Accountant? Explain your reasoning for selecting that option. Discuss your recommended course of action with respect to resolving the ethical dilemma and the effect on the Chief Accountant. You should clearly outline and discuss your recommendation for Ryan's course of action. The course of action should go beyond the limited and specific actions indicated by the IMA's Statement of

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<sup>1</sup> Institute of Management Accountants Statement of Ethical Professional Practice, [http://www.imanet.org/PDFs/Statement%20of%20Ethics\\_web.pdf](http://www.imanet.org/PDFs/Statement%20of%20Ethics_web.pdf).

Ethical Professional Practice and should consider: (1) preserving good working relations within the organization; (2) how to improve the organization; (3) how to reduce ethical dilemmas in the future, and; (4) how to improve Ryan's image within the organization by how he handles this issue.

## CASE TEACHING NOTES FOR FACULTY

### Accounting Profession and Values

To understand the importance of codes of conduct and their role in the profession, it is crucial to first understand the nature of a profession. A profession is formed on the basis of: (1) a generally accepted complex body of knowledge; (2) standards for admission; and (3) an enforceable code of ethics. The general public relies on the specialized attributes of professionals and trusts that they will perform their duties in the public interest, first and foremost, followed by the profession, the organization for which they work, and finally, to themselves. In June 2005, the International Federation of Accountants (IFAC) issued The Code of Ethics for Professional Accountants, which defined an accountant's duty to act in the public interest:

"A distinguishing mark of the accountancy profession is its acceptance of the responsibility to act in the public interest. Therefore, a professional accountant's responsibility is not exclusively to satisfy the needs of an individual client or employer. In acting in the public interest, a professional accountant should observe and comply with the ethical requirements of this code."<sup>2</sup>

As a crucial element of a profession, a code of ethics guides professionals to protect the quality and reputation of the profession and maintains the public trust. The IFAC Code further states that while professional accountants have a responsibility to further the legitimate aims of their employing organizations, they also have the absolute duty to comply with the fundamental principles of the Code. The IMA's Statement of Ethical Professional Practice is consistent with the IFAC Code and is also principle-based. The IMA's Statement of Ethical Professional Practice is based on four overarching principles (honesty, fairness, objectivity and responsibility) that define the values of management accounting and a set of standards, to which management accountants must comply.

- **Honesty.** Honesty is a facet of moral character that is evidenced by such things as integrity, truthfulness, and straightforwardness and the absence of behavior such as lying, cheating, or theft. Integrity refers to honesty and truthfulness as the motivation for your actions.
- **Fairness.** Fairness refers to the absence of bias. In accounting, this means fairness in presentation that requires neutrality in the preparation of information and reports. The information will not be biased in favor of one group or position over another.
- **Objectivity.** Objectivity means freedom from subjective valuation of transactions or events in business. Measures should have supporting evidence that is verifiable and free from opinion; it involves impartiality and intellectual honesty.

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<sup>2</sup> <http://web.ifac.org/publications/international-ethics-standards-board-for-accountants/code-of-ethics>, Code of Ethics for Professional Accountants, Section 100.1, page 7 of 102.

- Responsibility. An accountant is ethically responsible to those who rely on his/her work. An accountant is responsible to the general public, his/her profession, company management, investors, creditors, outside regulatory bodies, and anyone who relies on the information he or she presents. Responsibility for management accountants also focuses on providing financial information useful in evaluating efficiency and effectiveness of managers or department heads, on the basis of financial performance directly under their control.

These are the values by which management accountants agree to abide. The standards contained in the Statement of Ethical Professional Practice are guidelines that control behavior, to help management accountants “operationalize” the values upon which the statement is based.

### **Suggested Solution to Case Question 1**

Case question 1 stated: “What are the underlying ethical issues implied by what the VP of Sales is asking the Chief Accountant to do?” Students should recognize that the VP of Sales is attempting to take advantage of the Chief Accountant’s lack of experience with the organization. He is focused on meeting his personal goals and those of his department. While he appears to propose actions that benefit the company and the stakeholders, he is essentially asking the Chief Accountant to make changes to how costs are accounted for. Neither man is authorized to make these changes which could have far-reaching negative effects on the organization. The VP of Sales has not fully considered the organizational consequences and the Chief Accountant’s professional reputation.

### **Suggested Solution to Case Question 2**

Case question 2 stated: “Who are the stakeholders that will be affected by how Ryan responds to the VP of Sales proposal? Describe how the request might affect each of the stakeholders? What is Ryan’s responsibility to each stakeholder? When answering this question, think about the people and organizational positions specifically identified in the case and think beyond those to people or organizations not specifically mentioned.” Students should structure their response according to the stakeholder’s position and responsibilities and from the perspective of encouraging others to comply with the same ethical principles that apply to professional accountants. At a minimum, they should discuss the VP of Sales, the maintenance and quality control managers, the VP of Manufacturing, and the CEO. A complete response would include customers, other employees, and stockholders as other affected stakeholders.

- VP of Sales. Ryan should recognize that the VP of Sales’ proposal is motivated by self-interest that will result in sub-unit optimization as opposed to system-wide improvements. The VP of Sales feels pressure to meet sales goals and retain his top salespeople. Ryan should consider whether the loss of salespeople is a real threat, the underlying causes, and what pressures exist in the market. He should examine practices within the firm that may inadvertently pressure Sid to manipulate costs to achieve his objectives. Considering these issues can help Ryan structure a response that is both ethical and effective at addressing the issue and that may encourage Sid to find more ethical solutions to problems in the future.
- Maintenance Department Manager. This manager is responsible to keep equipment operating within specification to avoid work outages and defective units. He is responsible to meet this objective within budget. Increased production will further burden the machines, his staff, and cost more. Making the proposed change will ease maintenance scheduling and

his costs won't change, but it may jeopardize his primary objectives. Ryan must consider how the department's performance is measured to ensure that the department manager has the proper incentives to act ethically. He should encourage the manager to fully disclose the effect of the proposed change on the defect rate, and the life and reliability of the equipment.

- **Quality Control Manager.** This manager is responsible to assess and report the quality control results. He should determine what preventive and appraisal measures and systems are needed to satisfy the firm's quality objectives. These include the nature and timing of maintenance and inspections. Making the proposed change may hinder him from achieving his objectives. The company's reputation and market share may suffer. Ryan must understand that any changes to policies that affect quality should include substantial input from this manager. Ryan should also examine how the manager's performance is measured to ensure that the manager's incentives are aligned with the company's quality objectives.
- **VP of Manufacturing.** This manager is responsible for timely production within company specifications. He must schedule and supply inputs to production (material and labor) and use other capital to meet production targets. He needs accurate projections, trained workers, and reliable equipment. Ryan must recognize that his decision impacts all of these things. Ryan's failure to obtain this manager's input, to provide updated budgets, and to change policies that impact the manager's ability to do his job have operational and ethical impacts.
- **CEO.** The CEO is ultimately responsible for the firm's performance including financial performance, operational performance, and corporate moral and legal conduct. The CEO sets the tone for ethical conduct by defining it, acting ethically, and providing the proper incentives for employees to act ethically. There were "clues" in the case narrative that implied some practices that would not motivate ethical behavior. Students should briefly discuss these issues. First, the CEO defined contribution margin per unit as a required objective. That objective, in and of itself, was the primary motivation for the VP of Sales to suggest the change. Had the objective been the profit itself, then the VP would not have focused on restructuring costs and may have devised a way to achieve the profit objective in a more ethical manner. Second, if each manager is focused on his own departmental budget to the detriment of the company performance, it implies that the incentive system is misaligned. Third, if managers are used to activity that differs significantly from budget, then the budgets are not accurate and there may be budgetary slack issues. Fourth, if the quality control and maintenance managers are only concerned about their budgets and not about the actual defect rate as the VP of Sales indicates, then the firm may not be measuring and rewarding employees for the operational measures that drive the desired results. If Ryan considers these issues and the effect of the culture on employee conduct, it would help him assess the motives and responses of the managers to the problem.
- **Other Stakeholders.** If the proposed change is made, customers will pay less but the chance of defective products increases. Increased production demands may result in delivery delays, which will reduce customer satisfaction. If Ryan supports the change, he must know that there is a chance of increased quality issues. Other employees in the firm may also be adversely impacted by declining customer satisfaction, increasing defective units, and increasing long-term costs related to greater demands and less maintenance on equipment. Finally, stockholders may gain in the short-term but lose out in the long-term.

### **Suggested Solution to Case Question 3**

Case question 3 stated: “Put yourself in Ryan’s position. Just like Ryan, you do not know much about this firm. What would you research about how this organization is “run”? Are the budgets and measures of success appropriate within this firm? What would you need to find out about the ethical culture of the firm, the procedures, the policies, and the management decision making relationships that you would have to know in order to make a good decision about the VP of Sales’ request?” Ryan’s position as Chief Accountant includes ethical responsibilities to both his employer and the accounting profession. Students should address both perspectives. Some students may also identify personal ethical considerations. From the organizational perspective, Ryan is obligated to comply with established procedures and protect the firm’s overall interests. First, since Ryan is new to the company, he should investigate if the firm has a code of conduct. Reviewing the conduct code will help him assess the culture and guide him toward the best course of action. Second, Ryan needs to research the firm’s procedures regarding maintenance and quality control. Sid’s proposal requires changes to operational procedures for maintenance and quality control. The changes may increase quality issues and impact the firm’s future image and market share. Third, Ryan should research procedures regarding budgeting. The VP of Sales says Ryan does not need to prepare a new budget because manufacturing expects and responds to increases in production. This implies a problem with budgetary slack. The VP of Sales tells Ryan that maintenance and quality control will not care if the change is made as long as their budgets don’t change. This implies a suboptimal focus on departmental costs, reflecting an exclusive financial measure with inattention to other nonfinancial performance measures (e.g., defects and returns). Ryan should also determine what his obligation is with respect to preparation of budgets. Is it the firm’s practice to update budgets to reflect changes? Fourth, Ryan needs to research the reporting structure and working relationships between departments in determining how to respond. At a minimum, he should find out with whom he should consult and communicate in both the consideration and resolution of the problem.

A well-thought-out response will also discuss focusing on contribution margin per unit and how that focus provides an incentive for inappropriate conduct to achieve organizational objectives. In achieving organizational objectives, Ryan should also be concerned with how those objectives are achieved and the related consequences thereof.

#### **Suggested Solution to Case Question 4**

Case question 4 stated: “Identify and discuss the standards from the IMA’s Statement of Ethical Professional Practice that apply to this case and which Ryan should consider in deciding how to handle the VP of Sales’ request.” Professionally, Ryan should consider his obligation as a professional accountant to be honest, fair, objective, and responsible and to encourage others in the organization to do the same. Specific standards are:

- **Competence.** Ryan should consider two competence standards. First, his obligation is to provide decision support information and recommendations that are accurate, clear, concise, and timely. If he agrees to Sid’s proposal, his decision to change the classification of quality and maintenance costs to fixed may not be a true reflection of these costs. The proposal to change the costs to periodic as opposed to production-based is suggested because a small number of units fail quality testing because machines need to be retuned and the company has made the product for a very long time. However, the small number of failures could be the result of quality testing and machine maintenance, not in spite of it. In addition, the VP

of Sales cites failures related to machinery, but not the level of failures overall, which could be much higher. Other failures could result from non-machine-related issues, such as human error and material defects. How long the firm has made the product is not relevant. It presumes that the labor force is experienced and that there is a relationship between the longevity of production and the quantity and quality of material supply. In fact, increased sales and production could cause more errors as workers become overstressed and greater demands are placed on supply. Thus, the assumptions used to justify the change are faulty. If Ryan supports the change, he would not be supplying information that is accurate or clear with respect to the nature of these costs. Second, Ryan must recognize and communicate his own professional limitations and constraints that could keep him from making a responsible judgment. Ryan lacks the technical competence to make a decision about how often maintenance and testing should be required. Also, he is new to the firm and is not familiar with the production process, the number of defective units, the causes for the past defects, or the potential impact such a change could have. At the very least, he should consult with the managers of maintenance and quality testing to gain their perspective on this issue and review previous testing results. He is obligated to communicate the issue, the request, and any proposed responses to his superior since he cannot responsibly address the issue.

- **Integrity.** Ryan is obligated to communicate with all parties impacted by the problem and/or the proposed solution. The VP of Sales proposes a solution that benefits sales more than any other department or the firm as a whole and that may actually be to the firm's detriment. Under Sid's proposal, sales revenue increases 21.5%, pre-tax profits increase 11.8%, and sales commissions increase a whopping 37.5%. Sid would accomplish both of his objectives to make his sales goal and to retain his top salespeople by giving them higher commissions. However, maintenance and quality control managers may suffer as quality falls, and manufacturing must respond to unanticipated increased demand. If Ryan relies on Sid to communicate with the other departments and managers, he violates the standard that requires him to regularly communicate to avoid the appearance of a conflict of interest. By supporting Sid's proposal, he supports a proposal that particularly benefits one individual over the firm, which certainly gives the appearance of a conflict of interest.
- **Credibility.** By rearranging the numbers and not creating a replacement cost budget, Ryan violates the credibility standard by not disclosing relevant information to others in the organization. Making maintenance and quality control costs fixed costs may not be a fair and objective portrayal of the costs. Ryan should request a budget meeting to discuss Sid's proposal so that all affected parties could have input into the decision. Ryan should also create a new budget after the meeting, if it is decided to alter any aspect of the budget.

### **Suggested Solution to Case Question 5**

Case question 5 stated: "Identify the Chief Accountant's alternative options for responding to the VP of Sales' proposal. Discuss the possible consequences and the organizational factors and professional standards applicable to each option. When answering this question, consider that Ryan could do any one of many different things, such as, agree, disagree, remain unsure of how he should respond to the proposal, etc. How should Ryan proceed under each alternative option? The case is not explicit about what corporate guidance exists to resolve ethical dilemmas, so you may have to consider hypothetical alternatives." Ryan could disagree with the plan, he could unilaterally agree to the plan, he could consider the plan in

consultation with all internal stakeholders, or he could suggest an alternative plan. If Ryan agrees with the plan and does what the VP of Sales requests, he should be able to defend his actions to his superiors and to other affected stakeholders. This option could result in Ryan losing his position, especially if he does not consult with his superiors. If Ryan disagrees with the plan, he needs to discuss his decision with the VP of Sales to minimize harm to their professional relationship. He needs to explain his reasoning in a professional manner to educate the VP of Sales on ethical behavior in the accounting profession. If Ryan develops an alternative plan to help the VP of Sales accomplish his objectives while properly accounting for costs, this would allow Ryan to develop a good relationship with the VP of Sales and show his value to the company as a competent accountant and a team player. This option would require Ryan to talk with his superiors and other stakeholders, especially given his short time with the company.

If he determines that the request is unethical and is unsure how to proceed, he should first consult the company's policy on resolution of ethical conflicts. If no policy exists, Ryan should discuss the issue with his immediate supervisor. He could also confidentially discuss the issue with an impartial advisor (IMA Ethics Counselor or attorney) to better understand his options.

### **Suggested Solution to Case Question 6**

Case Question 6 stated: "Which of the options would you recommend to the Chief Accountant? Explain your reasoning for selecting that option. Discuss your recommended course of action with respect to resolving the ethical dilemma and the effect on the Chief Accountant. You should clearly outline and discuss your recommendation for Ryan's course of action. The course of action should go beyond the limited and specific actions indicated by the IMA's Statement of Ethical Professional Practice and should consider: (1) preserving good working relations within the organization; (2) how to improve the organization; (3) how to reduce ethical dilemmas in the future, and; (4) how to improve Ryan's image within the organization by how he handles this issue." While student responses will vary, responses should clearly demonstrate the student's ability to apply a professional code of conduct and an understanding of the operational impacts of the decision. The student's response should expand beyond his or her personal and even professional considerations to encompass organizational issues that affect ethical judgment and behavior. One reasonable response appears below.

"I would not do what the VP of sales proposed. Instead, I would work with him to find other, more ethical solutions to the problem. I would involve other managers and my immediate superior or at least fully communicate as things transpired. This would protect me personally by ensuring that I do not violate firm policies or offend people with whom I must work. I would not unnecessarily disclose the VP of sale's proposal. I would first discuss it with him to explain why I do not agree with it, why I feel it is unethical, and finish with a willingness to help solve the problem. This would show him that the proposal was unethical, why, and help him think about ethical ways to solve the problem. This shouldn't make an enemy of him if the discussion is tactful and I empathize with him about the pressures he faces in his job. This decision is consistent with my professional ethical principles. Also, it protects the firm by considering all aspects of the issue and reducing negative impacts on the company. I would focus on the objective of obtaining profit and retaining key personnel (rather than meeting a contribution margin per unit goal). This requires discussing information related to the market, pricing, competitors, employee morale, quality initiatives, and results. I would focus on differentiating the product, real or imagined, and/or ways to reduce costs from efficiencies rather than

manipulation of numbers. Finally, I would review the performance measurement system used by the firm to achieve strategic objectives and review ethical codes of conduct and policies employed by the firm to motivate desired behavior. Possible consequences of my actions could be positive or negative. Poor handling by me could make an enemy of the VP of Sales. I could get a negative performance appraisal if my immediate superior feels that I handled the situation poorly, or if I inadvertently insulted him when discussing the firm's policies and incentives that led to the problem. Conversely, I could be praised for my accurate assessment of the underlying causes of the problem, a long-term solution, and improvements to the firm's ethical culture."

## SUGGESTIONS FOR GRADING

### Testing the Case with Students

This case was assigned with no background or case discussion in three sections of a cost accounting course for accounting majors. Two forms of assessment were used: (1) self-reported learning assessment (student surveys responses); and (2) independent learning assessment (faculty review of the written assignments using a grading rubric). Students assessed the case as a useful learning experience<sup>3</sup>, but results from the faculty reviewers were disappointing. Student comments shed some insight into the poor results; students overwhelmingly asked for a pre-case discussion, emphasizing issues outside the IMA's Statement of Ethical Professional Practice that should be considered in their ethical analyses. They wanted more depth and structure in the case requirements. Their concerns centered primarily on management issues, behavior, and culture and the interrelationship between these types of organizational issues and ethical principles. The faculty reviewers confirmed student comments by showing that the learning objective related to ethical considerations from an organizational perspective got the lowest assessment scores. Although student scores were low, students evaluated this learning objective very high after classroom discussion of the case. The case questions were then revised to provide more structure (revision 1) and a pre-case discussion was introduced along with some question clarifications (revision 2). The discussion included two parts: (1) accounting as a profession and the importance of a code of conduct/ethics in a professional context; and (2) organizational style and culture and their impact on behavior in organizations<sup>4</sup>. The revised case was assigned to four sections of undergraduate cost accounting (two sections for revision 1 and two sections for revision 2). Student surveys were distributed after the discussion of the case in class. Students responded to six statements derived from the case learning objectives; allowable responses ranged from 1 (the student strongly disagreed with the statement) to 5 (the student strongly agreed with the statement). Student responses were blind and students were told that their responses would be anonymous and used only to evaluate the case's effectiveness as an instructional resource. Mean student responses for all survey statements fell between 3.76

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<sup>3</sup> Students rated "I found the case to be a useful learning experience" 4.08 on average, where 1 = strongly disagree and 5 = strongly agree.

<sup>4</sup> The focus of this discussion was to make students think about functional-based versus activity-based management style and resulting incentives from each. A functional management style focuses on department level performance using financial performance measures. This style is implied in this case because they are concerned with meeting numbers, they are less concerned with nonfinancial measures (e.g., defects and returns), and they have budgetary slack issues.

(agree) and 4.05 (strongly agree). The student survey statements along with mean student responses for each survey statement are presented in Figure 3 (Appendix).

In addition to student surveys, case writing assignments submitted by students were assessed using a simple expectations rubric derived from the case's learning objectives. The assessment rubric scale ranged from 1 (the student's response did not meet faculty expectations) to 5 (the student's response markedly exceeded faculty expectations). Two independent instructors assessed the assignments and scoring discrepancies were discussed and reconciled. Mean student scores for all expectations fell between 2.94 (met expectations) and 3.96 (exceeded expectations). Assessment expectations along with mean student scores for each expectation are presented in Figure 3. The scores for the revised case improved markedly over the prior scores (these results are not shown in Figure 3) indicating that the changes to the case were effective.

### **Suggested Grading Guidance and Grading Rubric**

Based on the testing described above, faculty grading guidance was refined. Figure 4 (Appendix) suggests grading guidance for the six case questions. The grading scale ranges through the scale 1 = "student's response does not meet faculty expectations", 3 = "student's response meets faculty expectations", 5 = "student's response exceeds faculty expectations". Undefined intermediary scores of "2" and "4" allow faculty to assign grades between the defined categories. Figure 5 (Appendix) presents a grading rubric that can be completed by the faculty member for each student's response to the case. The grading guidance shown previously in Figure 4 is incorporated into the grading rubric and requires the faculty member to enter only check marks into the rubric. In the final boxes of Figure 5, the faculty member would multiply the number of check marks by the scoring weight and sum the results to obtain an overall numeric score. The faculty member is free to alter the point ranges suggested in the rubric for the student's final alphabetic score.

### **REFERENCES**

1. Institute of Management Accountants Statement of Ethical Professional Practice, [http://www.imanet.org/PDFs/Statement%20of%20Ethics\\_web.pdf](http://www.imanet.org/PDFs/Statement%20of%20Ethics_web.pdf).
2. <http://web.ifac.org/publications/international-ethics-standards-board-for-accountants/code-of-ethics>, Code of Ethics for Professional Accountants, Section 100.1, page 7 of 102.

**APPENDIX**

Figure 1: Ryan's Handout of the Current BEP and Budgeted Sales

	Per Unit	Produce & Sell BEP 157,500 Units	Produce & Sell <b>Budgeted</b> <b>200,000</b> Units	Based on a \$6.00 Selling Price
Selling Price (SP):	\$ 6.00	\$ 945,000.00	\$ 1,200,000.00	
<b>Variable Costs:</b>				
Variable Materials	\$ 1.00	\$ 157,500.00	\$ 200,000.00	
Labor	1.40	\$ 220,500.00	280,000.00	
Utilities	0.40	\$ 63,000.00	80,000.00	
<b>Maintenance</b>	<b>0.60</b>	<b>\$ 94,500.00</b>	<b>120,000.00</b>	
<b>Quality Testing</b>	<b>0.10</b>	<b>\$ 15,750.00</b>	<b>20,000.00</b>	
Sales Commissions	0.50	\$ 78,750.00	100,000.00	
Total VC	\$ 4.00	\$ 630,000.00	\$ 800,000.00	
<b>Contribution Margin (CM):</b>				
CM = SP – VC	\$ 2.00	\$ 315,000.00	\$ 400,000.00	
<b>Fixed Costs:</b>				
	Total			
Advertising	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	
Fixed Salaries	200,000.00	200,000.00	200,000.00	
Depreciation	50,000.00	50,000.00	50,000.00	
Property Taxes	25,000.00	25,000.00	25,000.00	
Insurance	30,000.00	30,000.00	30,000.00	
Total FC	\$ 315,000.00	\$ 315,000.00	\$ 315,000.00	
Total Pre-Tax Profits:		\$ 0.00	\$ 85,000.00	
<b>Break-Even Point (BEP) Units:</b>				
BEP Units = Total FC / CM	157,500			

Figure 2: Sid's Illustration of Modified BEP and Projected Sales

	Per Unit	Produce & Sell BEP 227,500 Units	Produce & Sell <b>Projected</b> <b>275,000</b> ←	Based on a \$5.30 Selling Price
Selling Price (SP):	\$ 5.30	\$ 1,205,750.00	\$ 1,457,500.00	
Variable Costs:				
Variable Materials	\$ 1.00	\$ 227,500.00	\$ 275,000.00	
Labor	1.40	\$ 318,500.00	\$ 385,000.00	
Utilities	0.40	\$ 91,000.00	\$ 110,000.00	
Sales Commissions	0.50	\$ 113,750.00	\$ 137,500.00	
Total VC	\$ 3.30	\$ 750,750.00	\$ 907,500.00	
Contribution Margin (CM):				
CM = SP – VC	\$ 2.00	\$ 455,000.00	\$ 550,000.00	
Fixed Costs:	Total			
Advertising	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	
Fixed Salaries	200,000.00	200,000.00	200,000.00	
Depreciation	50,000.00	50,000.00	50,000.00	
Property Taxes	25,000.00	25,000.00	25,000.00	
Insurance	30,000.00	30,000.00	30,000.00	Based on
<b>Maintenance</b>	<b>120,000.00</b>	<b>120,000.00</b>	<b>120,000.00</b> ←	Ryan's
<b>Quality Testing</b>	<b>20,000.00</b>	<b>20,000.00</b>	<b>20,000.00</b> ←	original
Total FC	\$ 455,000.00	\$ 455,000.00	\$ 455,000.00	budget
Total Pre-Tax Profits:		\$ 0.00	\$ 95,000.00 ←	Profit Increased
Break-Even Point (BEP) Units:		227,500		
BEP Units = Total FC / CM				

Figure 3: Student Survey and Assessment Results

Learning Objective	Student Survey Statement	Mean Student Response (*)	Assessment Expectation	Mean Student Score (**)
1	1. This case helped me develop an understanding of the ethical considerations of a problem from an organizational perspective.	4.02	1. Students should demonstrate an understanding of the issue as it relates to firm policy, culture, and from the perspective of the accountant's obligation to the firm.	2.94
2	2. This case helped me develop an understanding of the ethical considerations of a problem from a professional perspective as defined by the IMA Statement of Ethical Professional Practice.	4.00	2. Students should demonstrate their ability to apply a code of conduct to a practical business issue.	3.34
3	3. This case helped me understand who is affected by unethical conflict and how.	3.98	3. Students should demonstrate understanding of the major stakeholders and impact of the issue on them.	3.44
4	4. This case helped me identify alternative courses of action to solve business problems and ethical dilemmas, in particular as defined by the IMA Statement of Ethical Professional Practice.	3.76	4. Students should be able to identify multiple alternatives and discuss the implications of each.	3.32
5	5. This case helped me develop my ability to reason and select solutions to ethical dilemmas that extend beyond my personal considerations.	3.96	5. Students should demonstrate their ability to select an ethically-defensible solution to a business problem.	3.86
Overall Value Statement	6. Overall, I found the case to be a useful learning experience.	4.05	N/A	N/A

(\*) Student Survey Scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

(\*\*) Assessment Scale: 1 = did not meet expectations, 2 = met minimal expectations, 3 = met expectations, 4 = exceeded expectations, 5 = markedly exceeded expectations.

Figure 4: Suggested Grading Guidance

LO	Q#	Scoring (1 through 5)				
		1 = Does Not Meet	2	3 = Meets	4	5 = Exceeds
1	1	Student restates case facts, does not understand the basic issue, or identifies less than two of these relevant issues: (1) self-interest; (2) authorization to make changes; (3) short versus long-term impacts of decisions; and (4) expertise and experience needed to make decisions/changes.		Student identifies at least two of these relevant issues: (1) self-interest; (2) authorization to make changes; (3) short versus long-term impacts of decisions; and (4) expertise and experience needed to make decisions/changes.		Student identifies at least three of these relevant issues: (1) self-interest; (2) authorization to make changes; (3) short versus long-term impacts of decisions; and (4) expertise and experience needed to make decisions/changes.
3	2	Student is unable to identify relevant stakeholders and/or identification and discussion is cursory.		Student identifies mostly internal stakeholders and evidences understanding of the impact on the affected stakeholder.		Student identifies both internal and external stakeholders and provides a thorough discussion of the impact on each.
1	3	Student fails to demonstrate an understanding of Ryan's obligations to the firm. Answer discusses less than two of these topics: (1) code of conduct; (2) budget and policy decision process; (3) president's intent; (4) budgetary slack; (5) appropriateness of performance measure (CM).		Student demonstrates understanding of Ryan's obligation to the firm. Answer discusses at least two of these topics: (1) code of conduct; (2) budget and policy decision process; (3) president's intent; (4) budgetary slack; (5) appropriateness of performance measure (CM).		Student demonstrates a thorough understanding of Ryan's obligation to the firm - Answer includes discussion of at least three of the following: (1) Code of Conduct; (2) budget and policy decision process; (3) president's intent; (4) budgetary slack; (5) appropriateness of performance measure (CM).
2	4	Student fails to identify proper standards violated, identifies the standards but lacks good discussion, and/or reveals poor understanding of the standards.		Student identifies at least two of the correct standards (competence, integrity, and credibility), discusses each well, or identifies all three with only a weak discussion.		Student correctly identifies competence, integrity, and credibility and thoroughly discusses each.
4	5	Student identifies multiple alternatives and provides a cursory discussion of the implications of each.		Student identifies multiple alternatives and discusses the implications of each.		Student identifies multiple alternatives and thoroughly discusses the implications of each: (1) organizational factors; (2) ethical standards; (3) interpersonal issues; (4) work relationships; (5) financial issues; and (5) self-interest.
5	6	Student does not select a viable alternative, OR selects alternative but just reiterates what has been previously stated, OR selects alternative but does not support the choice through discussion.		Student selects one alternative and provides support for that choice.		Student selects and defends one alternative. Discussion is thorough, i.e., relates to the profession and the firm, Ryan's standing in the firm and the profession, and/or includes proposals to reduce similar future problems.

LO = Learning Objective; Q# = Case Question Number

Figure 5: Grading Rubric

Student's Name \_\_\_\_\_

Case Question 1: What are the underlying ethical issues implied by what the VP of Sales is asking the Chief Accountant to do?

An "Exceeds" answer meets these criteria:	Place one check mark below				
	1 Does Not Meet	2	3 Meets	4	5 Exceeds
Student identifies at least three of these relevant issues:					
(1) Self-interest that specifically benefited the VP of Marketing;					
(2) Making decisions that neither man had the authority to make;					
(3) The existence of short vrs long-term impacts of the decisions;					
(4) Making decisions that neither man had the experience or qualifications to make;					

Case Question 2: Who are the stakeholders that will be affected by how Ryan responds to the VP of Sales proposal? Describe how the request might affect each of the stakeholders? What is Ryan's responsibility to each stakeholder? When answering this question, think about the people and organizational positions specifically identified in the case and think beyond those to people or organizations not specifically mentioned.

An "Exceeds" answer meets these criteria:	Place one check mark below				
	1 Does Not Meet	2	3 Meets	4	5 Exceeds
The student:					
(1) Identified internal stakeholders;					
(2) Identified external stakeholders;					
(3) Developed a thorough discussion of the impact on each.					

Case Question 3: Put yourself in Ryan's position. Just like Ryan, you do not know much about this firm. What would you research about how this organization is "run"? Are the budgets and measures of success appropriate within this firm? What would you need to find out about the ethical culture of the firm, the procedures, the policies, and the management decision making relationships that you would have to know in order to make a good decision about the VP of Sales' request?

An "Exceeds" answer meets these criteria:	Place one check mark below				
	1 Does Not Meet	2	3 Meets	4	5 Exceeds
The student discusses at least three of the following:					
(1) Ryan should search-out existing ethics policy or code of conduct;					
(2) Ryan should search out the budget and policy decision processes, including with whom he should consult and communicate;					
(3) Ryan should gain a better understanding of the President's intent;					
(4) Ryan should question current budget slack that allows operations to respond spontaneously to production changes;					
(5) Ryan should question if success measures are currently inappropriate including the current focus on CM.					

Figure 5: Grading Rubric (Continued)

Case Question 4: Identify and discuss the standards from the IMA’s Statement of Ethical Professional Practice that apply to this case and which Ryan should consider in deciding how to handle the VP of Sales’ request.

An “Exceeds” answer meets these criteria:	Place one check mark below				
	1 Does Not Meet	2	3 Meets	4	5 Exceeds
Student identifies / discusses only the appropriate professional standards:					
(1) Competence — Ryan must provide accurate, clear, concise, and timely information and recommendations; and, should recognize his own professional limitations that could preclude him from making a responsible judgment.					
(2) Integrity — Ryan is obligated to communicate with all parties impacted by the problem or the proposed solution.					
(3) Credibility — Ryan is obligated to disclose relevant information to all affected people in the organization.					

Case Question 5: Identify the Chief Accountant’s alternative options for responding to the VP of Sales’ proposal. Discuss the possible consequences and the organizational factors and professional standards applicable to each option. When answering this question, consider that Ryan could do any one of many different things, such as, agree, disagree, remain unsure of how he should respond to the proposal, etc. How should Ryan proceed under each alternative option? The case is not explicit about what corporate guidance exists to resolve ethical dilemmas, so you may have to consider hypothetical alternatives.

An “Exceeds” answer meets these criteria:	Place one check mark below				
	1 Does Not Meet	2	3 Meets	4	5 Exceeds
Student identifies multiple alternatives and discusses implications of each:					
(1) What organizational factors are affected by each alternative;					
(2) What professional standards are affected by each alternative;					
(3) What interpersonal issues arise under each alternative;					
(4) What work relation issues arise under each alternative:					
(5) What financial issues arise under each alternative;					
(6) Which alternatives involve issues of self-interest versus what is “best” for the firm.					

Figure 5: Grading Rubric (Continued)

Case Question 6: Which of the options would you recommend to the Chief Accountant? Explain your reasoning for selecting that option. Discuss your recommended course of action with respect to resolving the ethical dilemma and the effect on the Chief Accountant. You should clearly outline and discuss your recommendation for Ryan’s course of action. The course of action should go beyond the limited and specific actions indicated by the IMA’s Statement of Ethical Professional Practice and should consider: (1) preserving good working relations within the organization; (2) how to improve the organization; (3) how to reduce ethical dilemmas in the future, and; (4) how to improve Ryan’s image within the organization by how he handles this issue.

An “Exceeds” answer meets these criteria:	Place one check mark below				
	1 Does Not Meet	2	3 Meets	4	5 Exceeds
The student selects and comprehensively defends chosen alternative:					
(1) Arguments relate to obligations of the accounting profession;					
(2) Arguments relate to doing what is best for the firm;					
(3) Arguments relate to Ryan’s standing in the firm and the profession;					
(4) Arguments include recommendations to avoid similar problems in the future.					

Case Question	Point Calculations for All Case Questions	1 Does Not Meet	2	3 Meets	4	5 Exceeds
1	Repeat the check mark given this case question					
2	Repeat the check mark given this case question					
3	Repeat the check mark given this case question					
4	Repeat the check mark given this case question					
5	Repeat the check mark given this case question					
6	Repeat the check mark given this case question					
Total	Sum the check marks for each column					
	Multiply the sums by these weights	x 1	x 2	x 3	x 4	x 5
	Products of the multiplication					
	Sum of the five products					
Grading Rules (*)	If sum is between 27-30 assign a grade of “A”					
	If sum is between 22-26 assign a grade of “B”					
	If sum is between 16-21 assign a grade of “C”					
	If sum is between 10-15 assign a grade of “D”					
	If sum is between 0-10 assign a grade of “F”					

(\*) Faculty members may change the ranges of the sums to meet his/her own grading preferences